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NOTES ON A GLASS BEAKER WITH APPLIED DECORATION FROM THE SARMATIAN CEMETERY OF TIMIȘOARA – HLADIK 1 (TIMIȘ COUNTY)

Abstract: The rescue archaeological excavations conducted during 2019–2020 within the range of Timișoara city – point Hladik 1 led to the discovery of a Sarmatian cemetery, where 139 inhumations and sixteen flat circular ditched burial enclosures were investigated. These are only a part of the cemetery, as it extends outside the limits of the excavated area. Grave furnishings, rather varied and rich, are represented by handmade and wheel-thrown pots, domestic and household objects, toiletries, silver coins, adornment and dress items and weaponry. To these adds a glass beaker with applied decoration, discovered among the items identified in grave 6, which is object of the article here.

Beakers decorated with glass trail applied hot on the Isings 33 type beaker body emerge as early as the second half of the 1st century AD, being diffused particularly in the north-Italian area and on the Dalmatian coast, where their manufacturing centres were in fact located. Made of colourless or green good quality glass, these beakers remain fashionable until the 3rd century AD. Produced in the same decorative manner, the exemplar here may be considered a local, later version of said type, most likely manufactured in the *officinae* of Pannonia, as suggested by parallels with similar specimens discovered at Savaria or Makò. It was made sometime during the last phase C1b – early phase C2 in the central-European chronology.

Given all analysis aspects of the glass beaker and other artefacts, the authors conclude that Gr. 6 at Timișoara – *Hladik 1* dates sometime to the second half of the 3rd century, most likely to its third quarter.

The recent preliminary analysis of the grave goods has evidenced that the dating of this group of 139 graves at Hladik 1 pertains *grosso modo* to the chronological frame comprised between late 2nd century and last decades/late 3rd century AD.

Keywords: *the Sarmatians, the Iazyges, graves, ditched burial enclosures, artefacts, the Pannonian Plain, the Banat, the Barbaricum.*

THE ARCHAEOLOGICAL CONTEXT AND GENERAL DATA ON THE CEMETERY

The archaeological site of Hladik 1, located in the Western Plain of Romania (Fig. 1), by the administrative boundary between Timișoara – *Freidorf* and Șag commune, is known in the academic literature as early as 1982, when it was identified by field walks¹. The site was investigated in more detail

¹ LAZAROVICI, RESCH, GERMANN 1983: 35; <http://ran.cimec.ro/sel.asp?descript=timoara-municipiul-timoara-timis-situl-arheologic-de-la-timoara---hladik-1-cod-sit-ran-155252.27>

during 2019–2020, when the rescue archaeological excavations conducted prior to the construction of the southern by-pass of Timișoara municipality revealed its complexity². The archaeological research identified Neolithic, Roman (Sarmatian settlement and cemetery) and early medieval habitations, as well as a few isolate finds dated to the Bronze Age (two features and two cremations)³ (Fig. 2/1).

The investigations of the two archaeological campaigns led to the discovery and research of 139 inhumations part of a larger cemetery. It is related to the neighbouring large settlement, where the two campaigns yielded several features (waste pits, ditches, kilns, sunken houses etc.)⁴.

The gravepits at Timișoara – *Hladik 1* are mainly rectangular with rounded corners, oval gravepits being established to amount to 10%. Gravepit sizes vary from one grave to another, their areas having different values⁵ as well. Grave layouts and burial ritual elements, where these could be noted or identified, are similar with those in the Sarmatian environment⁶. In the 139 graves dominates the southern-northern orientation of the deceased (with head towards S, SE, SW, SSE and SSW)⁷, which is a specific rite feature of the Sarmatian Iazygians of the Pannonian Plain throughout their inhabitancy in this space. Regarding the position of the deceased, in the cases where skeletons were not destroyed or highly disturbed subsequent to grave looting, it could be noted that the deceased were placed mainly on the back with hands and legs stretched, however variations were also found⁸.

The investigations of the two archaeological campaigns at *Hladik 1* also led to the identification and complete or partial investigation of **sixteen** flat circular ditches of which **thirteen** contained related graves inside⁹. Since three of the ditched enclosures (Cx 165, Cx 1004 and Cx 1032) lay mostly outside the perimeter of the investment project area, it is not known for certain whether these also contained graves¹⁰. All these ditched burial enclosures were provided, alike in the rest of the Sarmatian world¹¹, with access area to the internal space. The diameters of the circular ditched enclosures are comprised between 7 and 11.8 m and contain one or more burial features. Particular cases were recorded in Cx 124: four graves, Cx 138, Cx 139 and Cx 158, each with two¹². The ditched graves form two groups, and it was noted

that un-ditched graves surrounded them (Fig. 2). The form, grave grouping and presence of ditches evidence family or social relations among the deceased.

The furnishing of the 139 graves at Timișoara – *Hladik 1* is varied and rich, despite the fact that ninety-eight graves were looted since Antiquity¹³. It mirrors differences between female and male graves. Whilst some objects (for instance pottery, brooches, pendants, loops, knives etc.) emerge regardless the gender or age of the deceased, certain artefacts are specific and mark social, status and genre differences. All these finds show a stable Sarmatian community, with wide cultural influences diffused in the Sarmatian environment of the Pannonian Plain, while the rich furnishings together with the diversity of the burial rituals mirror the complexity of the cemetery¹⁴.

Pottery was discovered in sixty-seven graves, handmade pottery being found in twenty-one graves¹⁵ and wheel-thrown pots in forty-six¹⁶. In just one case (Gr. 61) were discovered two handmade pots, both in the northern side of the gravepit, in the feet area¹⁷. Household and domestic objects are represented by spindle weights (seventeen graves¹⁸) and iron knives (thirty graves¹⁹). Toiletries are evidenced by a fragmentary mirror, disk-shaped, provided with attached handle (Gr. 61) and two bronze pyxides (Gr. 60 and Gr. 24).

The adornment and dress items are by far the artefact class with most numerous items²⁰. These were discovered, except for the looted and entirely destroyed graves, in most graves where grave goods have survived, being represented by collars, bracelets, earrings, links, buckles and belt tips, pendants, bells, brooches and beads.

Among adornment and dress objects, most numerous are the beads, present in sixty-seven of the graves. The total number of the beads surviving intact amounts to 13.973, to which add other several thousands of fragments. In four of the graves, the number of beads exceeds 1000 pieces, plus numerous other fragments, while in other seventeen, a number of a few hundred of beads in each grave. Beads are accompanied by brooches discovered in thirty-nine graves²¹, in six being two exemplars each²². Bracelets come from among the grave goods of thirteen graves²³, in five being two each. Buckles, belt tips and belt fittings, not many either,

² The 2019 rescue archaeological excavations were performed during June 24 – November 28, while those of 2020 during September 19 – October 29. The 2019 research was conducted by Cristinel Fântâneanu, Cristian Florescu and Anca Mătiș, while that of 2020 by Liviu Bălan and Raluca Burlacu (National Museum of the Union Alba Iulia), whom we thank this way too for kindly allowing us to study the excavated graves.

³ BĂRCĂ *et alii* 2022, 513; BĂRCĂ/FLORESCU 2023, 224.

⁴ BĂRCĂ *et alii* 2022, 515; BĂRCĂ/FLORESCU 2023, 224, Pl. II/2; III/1; BĂRCĂ *et alii* 2024, 167, Fig. 2/2; 3/1.

⁵ BĂRCĂ *et alii* 2024, 172.

⁶ BĂRCĂ *et alii* 2024, 172–179.

⁷ BĂRCĂ/FLORESCU 2023, 225–226; BĂRCĂ *et alii* 2024, 186–188. In only one case the deceased was placed with the head towards NNE (Gr. 1) and WSW (Gr. 81).

⁸ BĂRCĂ *et alii* 2024, 188.

⁹ BĂRCĂ/FLORESCU 2023, 225, Pl. III/2; IV; BĂRCĂ *et alii* 2024, 179, 180–182, Fig. 3/2; 9–12. Some of these circular ditch enclosures survived only partially, with significant damages of some of their parts.

¹⁰ BĂRCĂ *et alii* 2024, 179, 181.

¹¹ See BĂRCĂ 2015, 103–118; BĂRCĂ 2020, 334–345.

¹² BĂRCĂ *et alii* 2024, 181, Fig. 9/3; 11/1; 12/2–3.

¹³ BĂRCĂ *et alii* 2024, 188.

¹⁴ These details have been widely discussed in BĂRCĂ 2022; BĂRCĂ *et alii* 2022; BĂRCĂ *et alii* 2024; BĂRCĂ/FLORESCU 2023.

¹⁵ Graves 17, 23, 24, 36, 39, 45, 50, 53, 55, 59, 61, 63, 69, 70, 80, 84, 88, 96, 104, 125, 128.

¹⁶ Graves 2, 6, 10, 11, 13, 15, 16, 18, 19, 20, 21, 22, 27, 29, 31, 32, 38, 40, 41, 42, 43, 47, 49, 52, 56, 60, 62, 67, 72, 73, 75, 78, 82, 87, 97, 98, 101, 103, 112, 119, 121, 122, 123, 129, 132, 139.

¹⁷ Possibly also, pottery might have been deposited in some of the looted and entirely destroyed graves.

¹⁸ Graves 6, 8, 19, 21, 24, 26, 39, 47, 55, 60, 63, 69, 70, 73, 82, 89, 104.

¹⁹ Graves 18, 20, 22, 31, 35, 36, 40, 44, 49, 52, 56, 60, 61, 62, 64, 67, 73, 75, 76, 87, 89, 93, 97, 101, 106, 110, 121, 128, 134, 139. Among the knives stands out the exemplar in Gr. 139, 22.5 cm long.

²⁰ For a series of parallels with these artefact classes in the area between the Lower Mureș, Tisza and the Danube see GRUMEZA 2014, 55–104; BĂRCĂ 2014, 94–132.

²¹ Graves 11, 16, 18, 20, 21, 22, 23, 24, 30, 36, 38, 39, 40, 45, 47, 49, 53, 55, 56, 62, 63, 70, 73, 75, 79, 83, 95, 98, 101, 103, 104, 116, 118, 121, 122, 123, 125, 129, 139.

²² Graves 11, 20, 62, 95, 104 și 129.

²³ Graves 21, 24, 29, 30, 36, 53, 67, 88, 94, 101, 125, 126, 129.

were yielded by ten graves²⁴, while collars were discovered in seven cases²⁵. In five graves were discovered earrings²⁶, in thirteen loops²⁷ and in four bronze (Gr. 60) or iron bells (Gr. 129 and Gr. 97 (two exemplars)). It is worth mentioning the presence in two cases (Gr. 18 and Gr. 60) of *Cypraea* pendants²⁸. Among the discovered pendants stands out the lunula-shaped pendant (Gr. 104) and that in silver, in the shape of a volute (Gr. 89). Since approximately 70% of the 139 graves were looted, it is more than certain that the number of adornment and dress objects was much higher.

Coins were discovered in twenty of the investigated graves²⁹, while in five of the 139 graves weaponry was discovered (lance heads³⁰ and swords³¹).

Lastly, it is worth mentioning that the 139 graves did not contain metal vessels, amphorae, arrowheads or harness items and that in just one case (Gr. 6), the grave goods contained a glass vessel (Gr. 6), which is discussed here.

GENERAL DATA ON GRAVE 6

The grave was discovered at 0.90 m deep from topsoil, grave limits being outlined rather clearly (Fig. 3/1).

The gravepit, rectangular with rounded corners, was oriented on the NNE–SSW axis and was 2.74 m long and 1.15–1.25 m wide (Fig. 3/1).

The grave was looted from Antiquity, while the skeleton was practically destroyed in most its part.

The skeletal remains preserved most part of the skull, jaw and mandible fragments with teeth, all located in the southern part of the gravepit, while in its central area emerged remains of long bone diaphyses (humeri, femurs and tibiae), ilium fragments, MTC₂-MTC₃ right side, the first phalanx of the right metatarsal, part of left shoulder blade exposing the incisure and partially the coracoid process fragment, two fragments of central rib parts, as well as two fragments that belong to C₂. According to the position of the skull and pot in the northern part of the gravepit, both *in situ*, it may be concluded that the deceased was placed in the grave with the head oriented to the SSW. Subsequent to the analysis of the bone remains, it was concluded that the deceased was an adult female aged at the time of death around 24–30 years³².

²⁴ Graves 13, 22, 35, 36, 40, 67, 103, 113, 132, 139.

²⁵ Graves 16, 21, 30, 69, 83, 90, 129.

²⁶ Graves 19, 24, 89, 113, 129.

²⁷ Simple loops, some with free ends, slightly distanced – graves 46, 47, 62, 69, 76, 82, 97; loops with overlapping, wrapped ends – graves 30, 46, 76, 82, 87, 104.

²⁸ *Cypraea* type pendants emerge in the Sarmatian environment of the Pannonian Plain starting with the last third of the 2nd century, being present until the second half of the 3rd century when they disappear, yet re-emerge during the last third of the 4th century (KOVÁCS/VADAY 1999, 259), LIKELY RE-BROUGHT BY NEW IRANIAN GROUPS.

²⁹ Graves 6, 13, 20, 22, 31, 35, 40, 45, 49, 56, 60, 62, 75, 87, 98, 110, 117, 121, 134, 139. The coins are Roman denars struck during the rule of emperors Vespasian, Titus, Trajan, Hadrian, Antoninus Pius, Marcus Aurelius and Septimius Severus.

³⁰ Graves 27, 31, 40, 101, 112.

³¹ Graves 31 and 40.

³² The anthropological analysis of the human bone remains in the site of Timișoara – *Hladik 1* was accomplished by Ana Fetcu, whom we thank this way for the amiable aid.

The grave goods consisted of the following:

1. Silver coin (*denarius*) discovered midway the gravepit. It is pierced and weighs 2.13 g, while the diameter is 17.7 mm (Fig. 3/1.2; 3/2a-b).

2. Twenty-four beads discovered in the northern part of the gravepit, in the feet area, between the pot and spindle weight (Fig. 3/1.4).

– ten glass beads duplicating the colour and shape of carnelian pieces. Sizes – 6.1–7.5 × 5.7–6.4 mm (and fragments) (Fig. 4/1–10).

– eight glass beads duplicating the colour and shape of carnelian pieces. Sizes – 5.3–8.4 × 5.3–7 mm (Fig. 4/11–18).

– five blue glass beads. Sizes – 7.6–9.3 × 4.5–5.2 mm (Fig. 4/19–13).

– a blue glass bead. Sizes – 10 × 6.2 mm (Fig. 4/24).

3. Biconical spindle weight found in the northern part of the gravepit. Height – 2.3 cm, maximum diameter – 3.1 cm (Fig. 3/1.5; 3/4).

4. Wheel-thrown pot made of fine fabric located in the northern part of the gravepit (Fig. 3/1.6), together with the glass beaker. It has an everted and rounded rim, short neck, bulging ovoid body, shoulders well-marked on the line of the maximum diameter, placed above its middle line and ring-foot. Height – 10.3 cm, mouth diameter – 5.1 cm, maximum body diameter – 7.7 cm, base diameter – 4.4 cm (Fig. 3/5).

5. Colourless glass beaker with a slight green tint, translucent, with air bubbles in composition, located in the northern part of the gravepit, in the feet area, near the pot. The vessel has a cylindrical body, slightly tapering towards the base and everted rim, with rounded lip. The body exhibits a decoration in relief, made of glass trail applied hot (*Bogenrippendekor*). Height – 7.4 cm; rim diameter – 4.8 cm; base diameter – 2.1 cm³³.

THE GLASS BEAKER ANALYSIS: ORIGIN, DISTRIBUTION, DATING, PRODUCTION CENTRES AND VARIATIONS

The decoration on the glass vessel in Gr. 6 is specific to Isings 33 type beakers, frequently found, as we shall see, especially in archaeological contexts datable between the last quarter of the 1st century AD and first half of the following century, although Classina Isings mentions, for an example at Suèvres, a late dating, to the 4th century AD³⁴.

Although the decorative elements are similar, the exemplar here displays notable differences from type Isings 33, especially in terms of body shape (Isings 33 type beakers have a slightly concave body), it resembling type Isings 106c2 datable between the second half of the 3rd century and the 5th century AD³⁵.

Nonetheless, we believe that the basic shape that inspired the artisans who made the beaker here is type Isings 33. This beaker form is made of colourless or bluish-green glass paste. They are conical and have a slightly flared rim and narrow ringfoot. Walls are decorated with trails, applied mostly

³³ We thank this way too our colleague Călin Adam for kindly drawing the glass beaker.

³⁴ ISINGS 1957, 47–48.

³⁵ ISINGS 1957, 130.

in elongated ovals. They could be separated or joined, giving the impression of an arcaded decoration.³⁶

Simonetta Biaggio-Simona emphasized that this beaker type is best represented among the finds at Canton Ticino in Switzerland. The finds there stand out both quantitatively and by the decorative variety (with no less than four decoration variants being identified), but also by their extended fashionable period. Thus, although most items date approximately between the Flavian period and early 2nd century AD, part of the finds may be dated also later, to the 2nd – 3rd century AD³⁷. In what the origin of these items is concerned, most specialists maintain it must be sought particularly among the north-Italian *officinae*, Biaggio-Simona hypothesising that such a workshop existed at Muralto³⁸.

The hypothesis of the north-Italian production of Isings 33 type beakers is supported in particular by the large number of beakers discovered there. In northern Italy, similar artefacts are mentioned at Aquileia (numerous colourless or bluish, good quality glass exemplars)³⁹, Valle di Cadore⁴⁰, Stanghelle di Franzine (province of Verona)⁴¹, Padova⁴², Pleba di Casteggio (province of Pavia)⁴³ or the Dalmatian coast in the cemetery at Zara, in Croatia.⁴⁴

As expected, type Isings 33 is well represented in the region of current Switzerland, beside the numerous mentioned examples from the Ticino canton area, beakers of the type being identified at Windisch (Vindonissa)⁴⁵, Avenches (Aventicum)⁴⁶ or Augst (Augusta Raurica)⁴⁷.

In what the Augst examples are concerned, it is worth noting that Beat Rütli distinguishes several variations of the type. One of these, form AR 49 of Augst, differs from AR 52 by the neater form of the arcade type decoration and larger vessel sizes.⁴⁸ Beakers of the type also emerged in the Danubian- Pontic area, with two known exemplars. The first comes from the cemetery at Tomis, discovered in a richly furnished cremation together with an Isings 50 type recipient, a glass *modiolus* type cup, a pottery *unguentarium* and two golden rings. The dating of the grave was established by late 1st century and early 2nd century AD⁴⁹. The second exem-

plar, fragmentary, was discovered in the fort at Hârșova (Carsium) and is identical with the Tomis exemplar, being made of thin, colourless glass⁵⁰.

Isings 33 type beakers are infrequent in the Eastern provinces of the Roman empire. Nevertheless, we may mention the find of a beautiful intact exemplar in the cemetery at Nymphaion in eastern Crimea, ascribed to the north-Italian workshops and dated to the 1st century AD⁵¹.

Similarly to the majority of glass wares produced in the workshops of the empire, these recipients circulated and were diffused among the Barbarian populations, owing to the trade relations of the time. Thus, beakers of the type emerged in the Sarmatian graves as well, like the case of the exemplar here.

In a looted Sarmatian grave from T 12 Gr 2 at Nagornoe (Reni district, Ukraine), there emerged a fragmentary beaker of type Isings 33-Eggers 188b⁵² together with a bowl of type *terra-sigillata* stamped *planta pedis*, an iron circular link buckle, a handmade censer and an iron fragmentary item⁵³.

It is worth underlining that this beaker type spread northwards in the Germanic area, Hans Eggers mentioning such finds in Ukraine at Bilcze Złote and in northern Poland at Bugno and Linowiec⁵⁴. The dating of the burial features of origin was established between late 2nd century AD and early 3rd century AD, while the German scholar argued these might have been imported from the north-Pontic area, on a route along the Dniester and Vistula towards northern Poland⁵⁵.

Closest parallels in terms of shape and decoration emerge though in Pannonia, which is not at all surprising should we take into consideration the relative proximity of the producing north-Italian centres.

Once with the second half of the 3rd century AD, slim beakers with curving body and flared rim, with or without ringfoot become highly popular in northern Pannonia. Most likely, these are local in origin, being produced by the secondary workshops of Arrabona, Brigetio or Aquincum⁵⁶, while some are very similar in terms of shape with the exemplar of Timișoara-*Hladik 1*, having including a concave base (Fig. 7/1–10). This hypothesis is supported by the numerous finds yielded by the late Roman cemetery of Aquincum, where beakers similarly shaped with the exemplar here, yet without applied decoration, emerged in graves datable between late 3rd century AD and early 4th century AD⁵⁷. In fact, it is worth mentioning that beakers with applied decoration like the exemplar of Timișoara – *Hladik 1* are unknown in 4th century AD – contexts.

An almost identical exemplar with the item here emerged in the Sarmatian grave no. 27 at Makó-Vöröskereszt II (Fig. 6/1–2), in the vicinity of the border with Romania, and implicitly, somewhat nearby the location of our find.

³⁶ LAZAR 2003, 93, type 3.3.3, discovered at Ptuj in a wider 1st century AD context.

³⁷ BIAGGIO-SIMONA 1991, 104–108, tip 7.4.1. Finds datable to the first half of the 3rd century AD come from Airolo, Madrano, Losone or Arcegno, in burial contexts. The author argues that late exemplars are smaller, their maximum height did not exceeding 10 cm.

³⁸ BIAGGIO-SIMONA 1991, 107.

³⁹ CALVI 1968, 57, Group D, no. 140–141, dated to the second half of the 1st century AD; see also MANDRUZZATO/MARCANTE 2005, 60–61, no. 18–21.

⁴⁰ CASAGRANDE/CESELIN 2003, 62, no. 11.

⁴¹ FACCHINI 1999, 208, no. 495, in a female grave, together with a mirror, pottery material and a Loeschke I C type lamp, dated to the second half of the 1st century AD.

⁴² ZAMPIERI 1998, 134, no. 227, in the cemetery, with the same dating like similar exemplars.

⁴³ BOLLA 2011, 251, from a grave dated to the 2nd century AD.

⁴⁴ RAVAGNAN 1994, 131, no. 248–249.

⁴⁵ BERGER 1960, 47, no.110–113, from Flavian date datable contexts, of north-Italian origin.

⁴⁶ BONNET-BOREL 1997, 31, type AV.V 58, no. 58, datable to the second half of the 1st century AD.

⁴⁷ RÜTTI 1991, 61, type AR 52, no. 1226–1228; Fünfschilling 2015, 317, datable to the 1st – 2nd century AD.

⁴⁸ RÜTTI 1991, 61, type AR 49, no. 1217–1218.

⁴⁹ BUCOVALĂ 1968, 271–279, M 466, Fig. 4.

⁵⁰ CHIRIAC 1999, 71, Pl. III/7.

⁵¹ KUNINA 1997, 315, no. 302, Fig. 168.

⁵² SIMONENKO 2008, 25, 78, cat. no. 113, Fig. 17/8; Pl. 123/2.

⁵³ SIMONENKO 2008, 78, cat. no. 113, Pl. 123; BĂRCĂ/SYMONENKO 2009, 223–224, 226, 237, 253, Fig. 85/3; 95/4.

⁵⁴ EGGERS 1951, type 188 a-c, no. 663, 1997 and 2095.

⁵⁵ EGGERS 1951, 61.

⁵⁶ DÉVAI 2013, 4–5; see also DÉVAI 2016, 109–121 for all variations with or without decoration.

⁵⁷ TOPAL 2003, no. 145, 152, 155, 156 and 162.

The grave goods at Makó-Vöröskereszt II contained, beside the glass beaker (sized: height – 8.7 cm; rim diameter – 5.7 cm; base diameter – 2.2 cm), a wheel-thrown pot, a silver brooch, an iron knife and an unidentifiable bronze Roman coin⁵⁸. The glass beaker was discovered placed beside the pot by the feet of the deceased⁵⁹, similarly to that in Gr. 6 at Timișoara-Hladik 1 (Fig. 3/1), yet also to other cases from the Sarmatian environment of the Pannonian Plain⁶⁰. Based on the grave goods and their parallels, the excavators dated Gr. 27 at Makó-Vöröskereszt II to late 3rd century AD or early following century⁶¹. Without further emphasis, we still wish to mention that the brooch is two-piece and has returned foot, the closing mechanism consisting of a bilateral spring composed of sixteen coils and inner chord. The body is arched and circular in section, while by the ends of the spring arms there are small decorative knobs. The foot, short compared to the body length, is returned forming a semicircular catchplate, wrapped in the lower body part by several coils. Brooches in this type, either single-piece or two-piece, in fact Germanic in origin, are specific to phases C1a-C2 (AD 180–310)⁶², with the note that types with decorative knobs on the spring support and arms emerge towards mid–3rd century AD. Given the morphological features of the brooch and existing parallels, including in the Sarmatian environment of the Pannonian Plain, we believe that Gr. 27 at Makó-Vöröskereszt II dates most likely sometime to the second half of the 3rd century AD, however no later than the end of this century.

The other similar exemplars were discovered still in the Pannonian Plain area, however, without clear find contexts. An exemplar is stored with the Museum of Győr and is an older donation⁶³ (Fig. 7/11) while other specimen, similar with the item of Makö, was discovered at Szombathely (Savaria) (Fig. 6/3), in western Hungary, and widely dated to the 3rd century AD⁶⁴.

According to the shape and decorative manner of the beaker here, it may be argued that it was most likely made by the same workshop that also produced the specimens at Makó and Savaria, namely a local workshop located in the northern area of Pannonia. It seems plausible that the artisan who manufactured these was of origin or was familiar with the works of the earlier workshops from northern Italy and the Dalmatian area. The artisan created an original version, decorating, in accordance with the Isings 33 beaker style type, a form specific to the period after mid–3rd century AD. In what the chronological interval of the beaker production is concerned, we believe it is placed sometime in the last phase C1b – early phase C2 of the Central-European chronology. Last but not least, we wish to mention that compared to the remaining grave goods yielded by the Sarmatian graves of the Pannonian Plain, the number of glass vessels is very

small, especially for the period of the 2nd – 3rd century AD⁶⁵. Starting with the 4th century AD, in the Sarmatian graves of the Pannonian Plain, glass vessels are represented by larger numbers, yet of a smaller typological diversity compared to the previous period⁶⁶.

In conclusion, it is worth underlining that these decorative influences survived and were diffused much outside the borders of the Roman empire. In Sweden, in late burial contexts of the 5th–6th century AD there emerge a series of locally made beakers with a decoration resembling the vessels here, although direct influence cannot be proven. Most interesting seems to be the beaker of Holm, the Överlänäs Parish, the Ångermanland province, which is also the most northerly find of this beaker type, however relatively similar finds come from Nygårds, Laubackan, Humla or Norrväie on Swedish territory⁶⁷.

A few notes on the chronological framing

As mentioned above, the grave goods also contained, beside the glass beaker, a silver coin (*denarius*), twenty-four glass beads, a spindle weight and a wheel-thrown pot.

The obverse of the silver coin (*denarius*) renders schematically a bare-headed Hadrian, to right and legend H[ADRIANVS] – AVG COS III P P, while the reverse depicts Hilaritas, veiled, standing, facing the front, adjusting her veil with both hands and legend P M TR P – COS III. The coin is pierced and is a Barbarian hybrid duplicate of denarii minted under emperor Hadrian and dates post AD 130–138 (Fig. 3/2a-b), thus it is no absolute dating criterion, especially since 2nd – 3rd century AD denarii remained in use and were deposited within graves a long time after issue.

Spindle weights like the item in Gr. 6 are frequently present in the Sarmatian world throughout the existence of their culture⁶⁸, including in graves from the territory located between the Lower Mureș, Tisza and the Danube⁶⁹. They are mainly yielded by female graves, similarly to the item in Gr. 6 from the cemetery at Timișoara – Hladik 1, where such items were further discovered in other sixteen graves⁷⁰.

Regarding spindle weights from Sarmatian burial contexts, it must be mentioned they commonly emerge in graves in one exemplar, in the hands, femur and knee area of the deceased⁷¹, mainly on their right side⁷². There are cases when in graves were discovered two or several spindle weights, like in grave 16 at Vrșac – Dvorište Eparhie Banata⁷³. It was noted

⁶⁵ VADAY 1989, 181–183; Fragments of glass vessels discovered during the archaeological investigations of the settlements ascribed to the Sarmatians evidence their number might have been higher than at first sight.

⁶⁶ VADAY 1989, 181–183; VADAY 2005; VADAY/DOMBORÓCZKI 2001, 51–54, 115; KÖHEGYI/VÖRÖS 2011, 339–340.

⁶⁷ ANDERSSON 2010, 71–85.

⁶⁸ See BĂRCĂ 2024, 91–92 WITH COMPLETE BIBLIOGRAPHY.

⁶⁹ See GRUMEZA 2014, 124–127, Fig. 45, Pl. 10/8, 18/2, 19/11, 22/2, 23/5, 33/3, 51/8, 54/7, 55/11, 59/6, 60/3, 63/4–5, 74/21, 75/15, 87/8, 92/2, 6, 96/3, 97/5, 98/14, 99/5, 9, 100/8–9, 11–12, 17, 21–22; BĂRCĂ 2014, 91–92, 27A/1, 59/5, 61/1.

⁷⁰ BĂRCĂ/FLORESCU 2023, 228, Pl. XVI.

⁷¹ For the Sarmatian graves discovered on the territory of Szolnok County it was noted that spindle weights were deposited mainly in the right hand area and right femur (VADAY 1989, 126). In the cemeteries of Banat, spindle weights emerge on both the right and left side of the body (see GRUMEZA 2014).

⁷² KULCSÁR 1998, 57, 98, 113.

⁷³ BARÁČKI 1961, Pl. XIII/1-2; GRUMEZA 2014, 277–278, Pl. 98/13–15.

⁵⁸ LÖFFLER/BORSÓDI 2019, 69–74, 76, Pl. 2–4.

⁵⁹ LÖFFLER/BORSÓDI 2019, Pl. 3/1, 4/3–4.

⁶⁰ For a few examples see VADAY/DOMBORÓCZKI 2001, 51–54.

⁶¹ LÖFFLER/BORSÓDI 2019, 74, 76.

⁶² See in this respect with complete bibliography the views expressed in connection with the returned foot brooches in BĂRCĂ 2014, 111–115; BĂRCĂ 2014a; COCIȘ 2014; ANDRZEJOWSKI 2017; ANDRZEJOWSKI 2018.

⁶³ DÉVAI 2016, 112, Fig. 2/4.

⁶⁴ BARKÓCZI 1988, 90–91, no. 127.

on several occasions that not all components of the spinning system were deposited within the graves, but only parts of it⁷⁴.

The twenty-four glass beads belong to well established types⁷⁵ frequently found in the Sarmatian graves of the Pannonian Plain and the territory located between the Lower Mureş, Tisza and the Danube.

A blue glass bead (Fig. 4/24) belongs to group III variant B2 in the classification drawn up by Lavinia Grumeza⁷⁶. The beads in this group from the Sarmatian environment are cylindrical, with longer axis than diameter, white, red, green, black and blue. They were produced early in the *officina* of Tibiscum (type Benea II), entering the production of workshop I in the aftermath of the Marcomannic Wars (late 2nd century AD – early 3rd century AD)⁷⁷. In the Sarmatian space these were discovered in 2nd century cemeteries, being recorded until the Hunnic period⁷⁸ as well.

Five blue glass beads (Fig. 4/19–13) belong to group V variant A2⁷⁹, while other ten exemplars that duplicate the colour and shape of carnelian items (Fig. 4/1–10) belong to group V variant A6⁸⁰. Multifaceted beads are included in this bead group. Types of straight form, regular (V.A) are numerous, green, cheery-red or black, copying similar chalcedony types. These emerge in large number in the Sarmatian cemeteries on the territory of the Banat⁸¹. They are also present in workshop 1 at Tibiscum (type Benea IV), likely subsequent to their demand on the Barbarian market. Such beads are found in large numbers also in the Central European space. In both areas, the dating is identical and rather wide: the 2nd – 4th/5th century AD⁸². Beads of the type are also numerous in the north-Pontic region, being specific to the period of the 1st – 4th century AD, yet they were mainly used during the 2nd – 3rd century AD⁸³.

Other eight beads imitating the form and shape of carnelian beads belong to group V/A.6 and IV/1.4 (Fig. 4/11–18), the latter (IV/1.4) being new shapes on the Banat territory. In group IV are included rectangular beads, four-faceted (IV.A-B). Beads of type IV are white, orange, red, cherry-red, blue or green, while their sizes vary, being recorded small items (approximately similar to a cube – like the exemplars from grave 6 at Hladik), but also longer than wider exemplars. These (IV/A.4) emerge for instance in the cemeteries at Hunedoara Timișană, Gr. 15⁸⁴, Nădlac, Site 3 Gr. Nord, Cx 366⁸⁵.

Regarding the wheel-thrown pot made of fine

fabric (Fig. 3/5) located in the northern part of the gravepit (Fig. 3/1.6), together with the glass beaker, both *in situ*, it must be mentioned it represents a shape found in the 2nd – 3rd/4th century AD Sarmatian environment.

In the Sarmatian milieu of the Pannonian Plain it was also noted that graves commonly contained a pot, placed mainly in the feet area of the deceased⁸⁶. Cases when in graves were placed two or several pots are rare, while the presence in some cases of pots placed in the upper body part, near the hand or in the head area, is believed ^{atypical}⁸⁷. In the region between the Lower Mureş, Tisza and the Danube, pots emerge in graves mainly in one exemplar, placed in the lower limbs area, yet there are graves with two or several pots⁸⁸. There are grave groups where vessels were placed in the upper part of the deceased's body, mainly in the head area, or placed both by the feet and the upper body part⁸⁹.

Given all the above, we believe that Gr. 6 at Timișoara – *Hladik 1* dates sometime to the second half of the 3rd century AD, most likely in its third quarter.

Lastly, subsequent to the recent primary analysis of the artefacts and other aspects of the 139 graves at Timișoara – *Hladik 1* it may be concluded that the burial remains investigated during 2019–2020 date *grosso modo* to the chronological frame comprised between late 2nd – last decades/late 3rd century AD⁹⁰. Nevertheless, it is very possible that the areas located beyond the north-eastern limit of the perimeter excavated during 2019–2020, where the cemetery extends⁹¹, may contain grave groups that would extend the chronological framing of the cemetery at Hladik 1 also into the 4th century AD.

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- ⁷⁴ KULCSÁR 1998, 57, 98, 113.
⁷⁵ For the typological framing see GRUMEZA 2019, Pl. 22–25 and GRUMEZA/BÂRCĂ 2020, Fig. 2–4.
⁷⁶ GRUMEZA 2019, Pl. 22/III.B2 and GRUMEZA/BÂRCĂ 2020, Fig. 2/III.B2.
⁷⁷ BENEA 2004, 227.
⁷⁸ VADAY 1989, 103.
⁷⁹ GRUMEZA 2019, Pl. 23/VA2 and GRUMEZA/BÂRCĂ 2020, Fig. 3/VA2.
⁸⁰ GRUMEZA 2019, Pl. 23/VA6 and GRUMEZA/BÂRCĂ 2020, Fig. 3/VA6.
⁸¹ GRUMEZA 2014 98. For instance, for Nădlac, Sit 3e Gr. Nord see GRUMEZA 2019, 59–60, Fig. 16; for the Hunedoara Timișană cemetery see graves 8, 14, 17 (GRUMEZA/BÂRCĂ/RUMEGĂ-IRIMUȘ 2014, 126, FIG. 27/5.1; BÂRCĂ 2014, Pl. 22/68–69; 36/14; 43/60–66).
⁸² TEMPELMANN-MAČZYŃSKA 1985, 38 (group XIV); VADAY 1989, 103.
⁸³ Cf. ALEKSEEVA 1978, 70, types 127–129, 131–135, Fig. 15, Pl. 33/40–41.
⁸⁴ BÂRCĂ 2014, 159, Pl. 39/89–96 (slightly irregular forms).
⁸⁵ GRUMEZA 2019, 60.
⁸⁶ KULCSÁR 1998, 66–69, 99, 115.
⁸⁷ KULCSÁR 1998, 66–69, 99, 115.
⁸⁸ GRUMEZA 2014, 128; BÂRCĂ 2014, 87–88.
⁸⁹ GRUMEZA 2014, 128.
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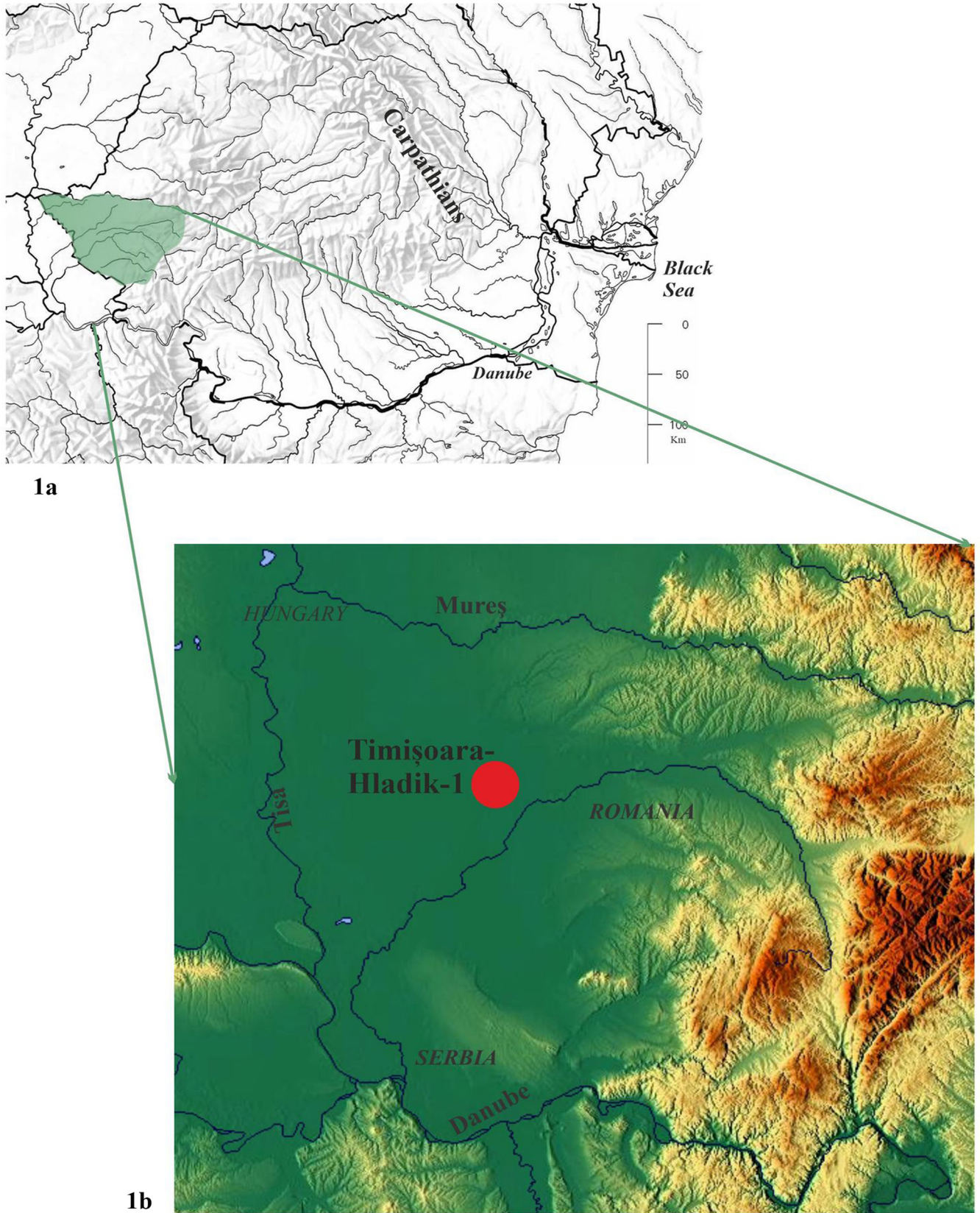


Fig. 1. Map with the location of the Timișoara-Hladik 1 site (after BÂRCĂ 2022).

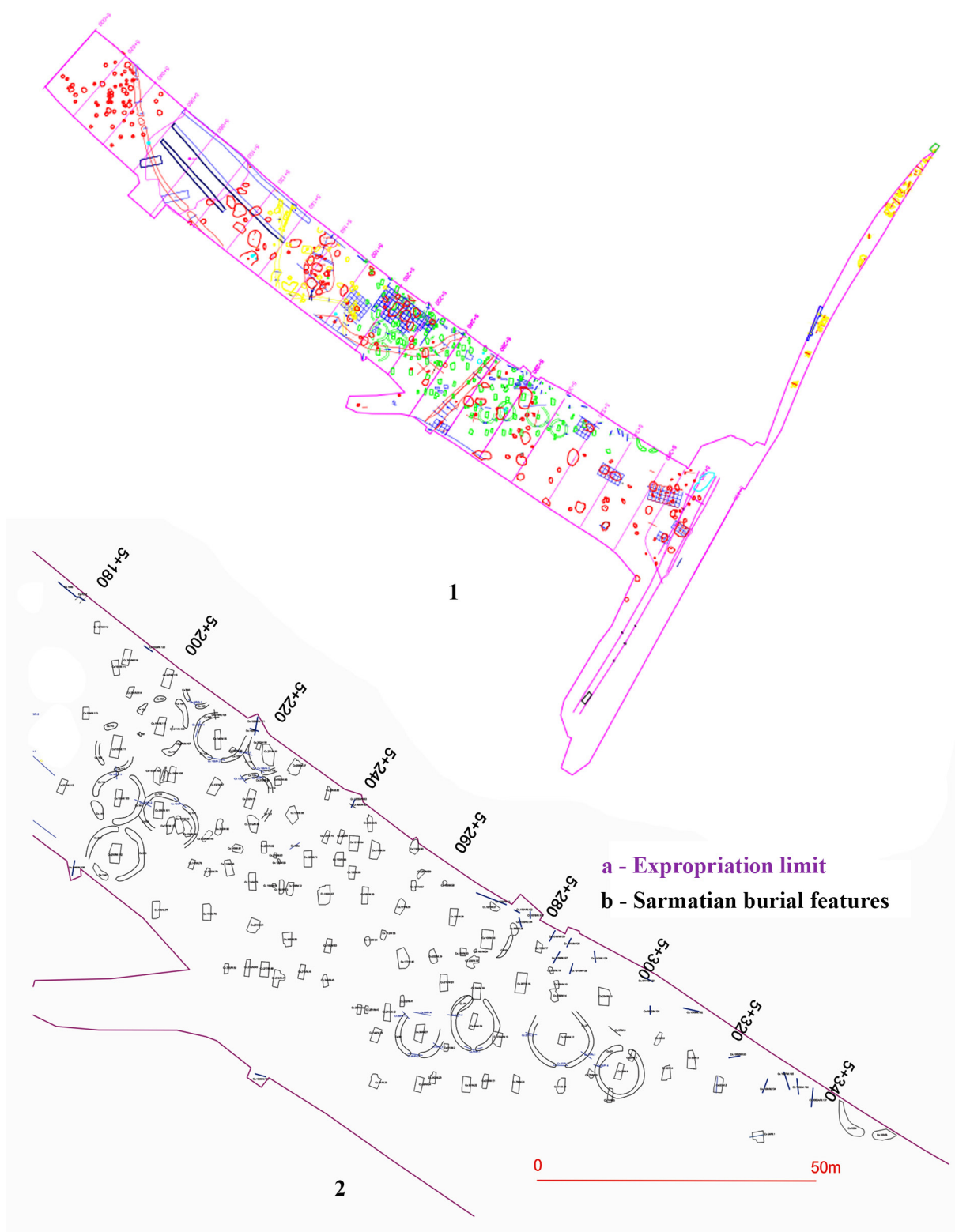
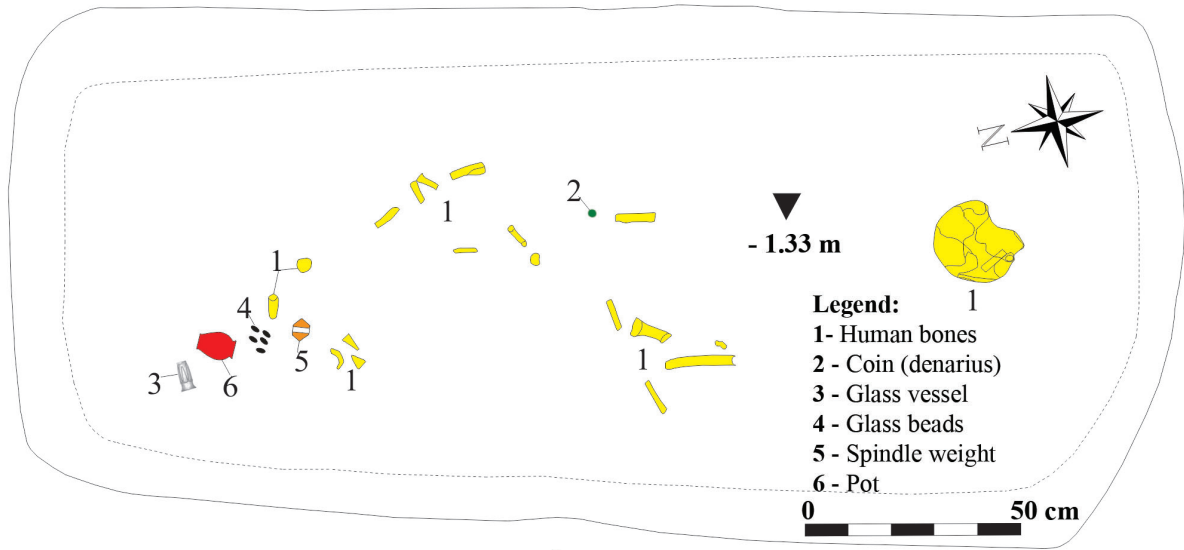


Fig. 2. 1. General plan print; **2.** Layout of Sarmatian burial features within the excavated area of the Timișoara-Hladik 1 site; **a** – Expropriation limit; **b** – Sarmatian burial features (after BĂRCĂ *et alii* 2022).

Gr. 6

▼ - 0.90 m



1

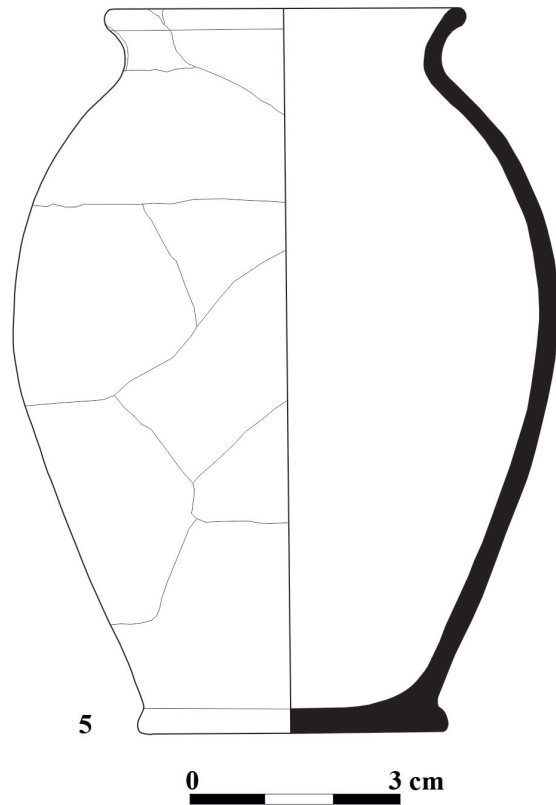
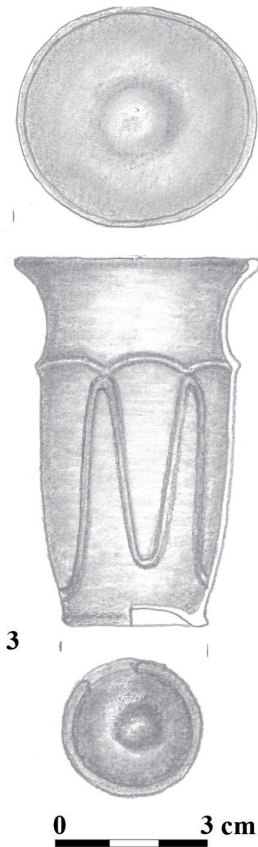
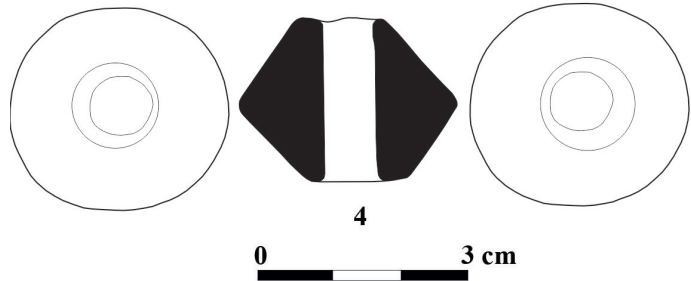


Fig. 3. Grave 6 at Timișoara-Hlădik 1 (drawing Cristian Florescu, Vitalie Bărcă).

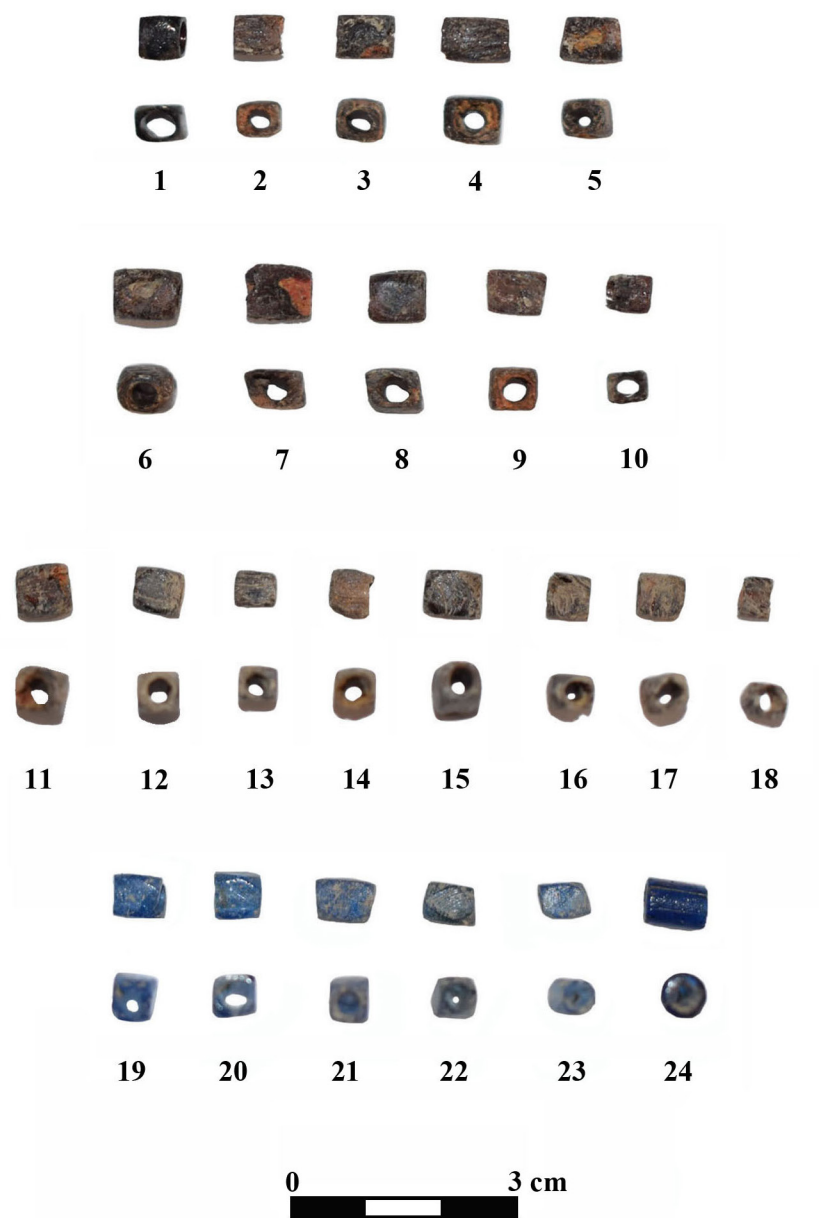


Fig. 4. Glass beads from Gr. 6 at Timișoara-Hlădik 1 (photo Lavinia Grumeza).



Fig. 5. The glass beaker from Gr. 6 at *Timișoara-Hladik 1* (photo Anca Matis).

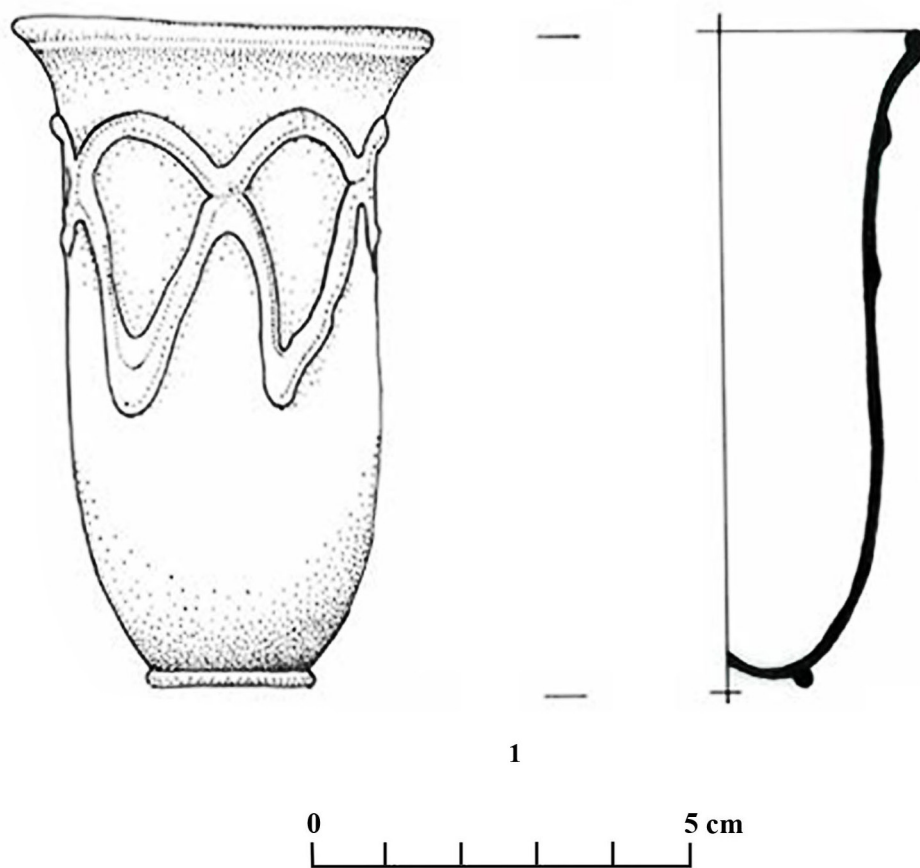


Fig. 6. Glass beakers with applied decoration from Gr. 27 at Makó-Vöröskereszt II (**1-2**) and Szombathely (Savaria) (**1-2** – after LÖFFLER/BORSÓDI 2019; **3** – after BARKÓCZI 1988).

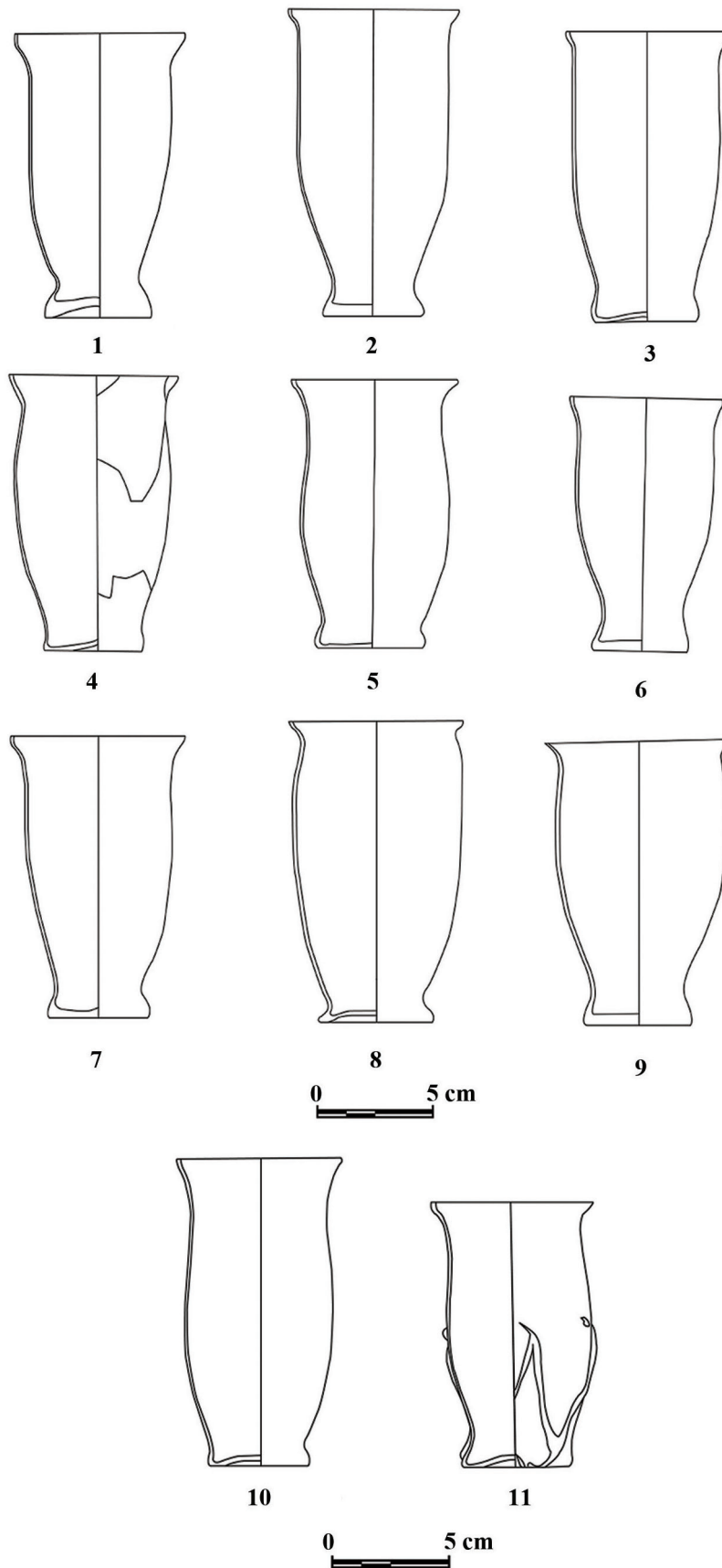


Fig. 7. Glass beakers. **1-5.** Budapesti Történeli Múzeum – Aquincumi Múzeum; **6.** Győr, Xántus János Múzeum; **7.** Esztergom, Balassa Bálint Múzeum; **8-9.** Budapest, Magyar Nemzeti Múzeum; **10-11.** Győr, Xántus János Múzeum (after DÉVAI 2016).